

Data Validation Checklist Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: TestAmerica – Savannah, GA
 Method: SW-846 8270D Low-Level (PAH)
 Matrix: Soil
 Reviewer: Kelly Brannigan, URS Group, Inc.
 Concurrence¹: Martha Meyers-Lee, URS Group, Inc.

Project No: 60430028; 1
 Job ID.: 680-115692-1
 Associated Samples: Refer to **Attachment A** (Sample Summary)
 Samples Collected: 08/10/2015 and 08/11/2015
 Date: 01/27/2016
 Date: 02/02/2016

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J flag sample result.	✓				
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.		✓		According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank is not associated with this sampling event. Blank contamination will be evaluated based on method blank results.	
12. Were target analytes detected in equipment/rinsate blanks?			✓		
13. Were analytes detected in samples below the blank contamination action level? If yes, U flag positive sample results <5x associated blank concentration (10x for common blank contaminants–phthalates)			✓	Target analytes were not detected during the analysis of the method blank.	

¹ Independent technical reviewer
 URS Group, Inc.
 Page 1 of 5

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
14. Is a field duplicate associated with this Job?	✓			<ul style="list-style-type: none"> 680-115692-2 (CV0511NN-CSD-6) is a duplicate of 680-115692-1 (CV0511NN-CS-6). 680-115692-15 (CV0511HH-CSD-12) is a duplicate of 680-115692-14 (CV0511HH-CS-12). 	
15. Was precision deemed acceptable as defined by the project plans?	✓			Refer to Attachment B (Field Duplicate Evaluation)	
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270D) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. An initial calibration is to be associated with each sample analysis. A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			<ul style="list-style-type: none"> Instrument ID: CMSD Initial Calibration: 08/13/2015 ICV: 08/13/2015 @ 21:39 CCV: 08/18/2015 @ 13:17² Instrument ID: CMSK Initial Calibration: 08/13/2015 ICV: 08/13/2015 @ 20:38 CCV: 08/19/2015 @ 12:12³ Instrument ID: CMSY Initial Calibration: 08/12/2015 ICV: 08/12/2015 @ 17:06 CCV: 08/18/2015 @ 12:10⁴ 	
19. Were calibration results within laboratory/project specifications? <ul style="list-style-type: none"> ICAL (Criteria: ≤ 20 mean %RSD ($\leq 50\%$ for poor performers), OR $r \geq 0.995$, OR $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> If %RSD > 20 ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J flag positive results and UJ flag non-detects If mean RRF < 0.050 (< 0.010 for poor performers), then J flag positive results and R flag non-detects (unless the lab analyzed a detectability check standard) ICV and CCV (ICV Criteria: $\leq \pm 30\% D$; CCV Criteria: $\leq \pm 20\% D$ ($\leq 50\%$ for poor performers) and RF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> If %D $>$ Control Limit ($> 50\%$ for poor performers), then J flag positive results and UJ flag non-detects 		✓		Instrument CMSD: <ul style="list-style-type: none"> ICV of 08/13/2015 @ 21:39 (ICV 680-396042/9): 1,1'-Biphenyl @ 39.4%D (Lab/Project: ≤ 30). None⁵ CCV of 08/18/2015 @ 13:17 (CCV 680-396705/2): <ul style="list-style-type: none"> Acenaphthene @ -21.3%D (Lab/Project: ≤ 20). Negative bias. Benzo[b]fluoranthene @ -21.1%D (Lab/Project: ≤ 20). Negative bias. Action: Associated acenaphthene and benzo(b)fluoranthene sample results ² are estimated (J/UJ flagged) Instrument CMSK: <ul style="list-style-type: none"> ICV of 08/13/2015 @ 20:38 (ICV 680-396036/9): <ul style="list-style-type: none"> 1,1'-Biphenyl @ 26.8%D (Lab: ≤ 20, Project: ≤ 30). None⁵ Dibenzofuran @ 23.0%D (Lab: ≤ 20, Project: ≤ 30). None⁵ 	J/UJ

² Associated samples: 680-115692-19 and -20³ Associated samples: 680-115692-18⁴ Associated samples: 680-115692-1 through -17⁵ Qualification of data is not required, as the analyte is not a target analyte; project specifications were also met.

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
<ul style="list-style-type: none"> ○ If RF <0.050 (<0.010 for poor performers), then UJ flag non-detected semivolatile target compounds 				<ul style="list-style-type: none"> ○ Fluorene @ 22.2%D (Lab: ≤20, Project: ≤30). Positive bias. None⁶ ○ Fluoranthene @ 23.9%D (Lab: ≤20, Project: ≤30). Positive bias. None⁶ ○ Dibenzo(a,h)anthracene @ 24.9%D (Lab: ≤20, Project: ≤30). Positive bias. None⁶ ○ Benzo(g,h,i)perylene @ 22.1%D (Lab: ≤20, Project: ≤30). Positive bias. None⁶ • CCV of 08/19/2015 @ 12:12 (CCV 680-396964/2): <ul style="list-style-type: none"> ○ Fluoranthene @ -21.4%D (Lab/Project: ≤20). Negative bias. Associated sample result³ is estimated (J flagged). ○ Indeno[1,2,3-cd]pyrene @ -32.3%D (Lab/Project: ≤20). Negative bias. Associated sample result³ is estimated (J flagged). ○ Dibenz(a,h)anthracene @ -22.5%D (Lab/Project: ≤20). Negative bias. Associated sample result³ is estimated (UJ flagged). 	
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J flag positive results when %R >Upper Control Limit (UCL) and J/R flag results when %R <Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J flag positive results and UJ flag non-detects			✓	LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			Batch 396525: 680-115692-1 (CV0511NN-CS-6), MS/MSD	
25. For all analytes with native sample concentrations < 4 x spiking level, were MS and MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none"> • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted. • MS and MSD %R<10: J and R Flag positive and ND results, respectively • MS and MSD %R >10 and <LCL: J Flag positive and UJ flag non-detect results • MS and MSD R% >UCL (or 140): J Flag positive results 	✓				
26. For all analytes with native sample concentrations < 4 x spiking level, were laboratory criteria met for precision during the MS and MSD analyses? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i>	✓				

⁶ Qualification of data is not required, as project specifications were also met.

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
<ul style="list-style-type: none"> If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J flag positive result and UJ flag non-detect result. 					
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none"> If %R for 1 Acid or BN surrogates <10, then J flag positive and R flag non-detect associated sample results (i.e., acid or BN results) If 2 or more Acid or BN %R >UCL, then J flag positive associated sample results (i.e., acid or BN results) If 2 or more Acid or BN %R ≥10%, but <LCL, then J flag positive and UJ flag non-detect associated sample results (i.e., acid or BN results) If 2 or more Acid or BN , with 1 %R >UCL and 1 %R ≥10%, but <LCL, then J flag positive and UJ flag non-detect associated sample results (i.e., acid or BN results) 		✓		Surrogate o-terphenyl was not recovered (0%) during the diluted analysis of samples 680-114892-1, -2, -6 through -12, -14 through -18, and -20. Qualification of sample results is not warranted, as the surrogate compound was diluted out of the samples.	
28. Were internal standard (IS) results within lab/project specifications? <ul style="list-style-type: none"> If IS area counts are less than 50% of the midpoint calibration standard, then J flag positive and UJ flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J flag positive and R flag non-detect results If the retention time of the sample's internal standard is not within 30 seconds of the associated calibration standard, R flag associated data. The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 	✓				
29. Were lab comments included in report?	✓			Refer to Attachment C (Case Narrative)	
Comments: The data validation was conducted in accordance with the <i>Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1</i> (OTIE, October 2012). The data review process was modeled after the <i>USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review</i> (EPA, October 1999) and <i>USEPA CLP NFG for Low Concentration Organic Methods Data Review</i> (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment D). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R The sample results are unusable. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.

UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

URS Group, Inc.

Data Validation Checklist (Continued)**Acronyms:**

%	Percent
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation
°C	Degrees Celsius
BN	Base/Neutral
CCV	Continuing calibration verification
CLP	Contract laboratory program
COC	Chain-of-custody
DFTPP	Decafluorotriphenylphosphine
DV	Data validation
EPA	Environmental Protection Agency
ICAL	Initial calibration
ICV	Initial calibration verification
IS	Internal standard
LCL	Lower control limit
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
NFG	National Functional Guidelines
PAH	Polynuclear aromatic hydrocarbons
QAPP	Quality Assurance Project Plan
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
SW-846	<i>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods</i> , EPA. Available: http://www3.epa.gov/epawaste/hazard/testmethods/index.htm [February 2, 2016]
UCL	Upper control limit

ATTACHMENT A
SAMPLE SUMMARY

SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-115692-1

Sdg Number: 680-115692-01

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-115692-1	CV0511NN-CS-6	Solid	08/10/2015 1400	08/15/2015 1050
680-115692-1MS	CV0511NN-CS-6	Solid	08/10/2015 1400	08/15/2015 1050
680-115692-1MSD	CV0511NN-CS-6	Solid	08/10/2015 1400	08/15/2015 1050
680-115692-2	CV0511NN-CSD-6	Solid	08/10/2015 1400	08/15/2015 1050
680-115692-3	CV0511NN-CS-12	Solid	08/10/2015 1405	08/15/2015 1050
680-115692-4	CV0511NN-CS-18	Solid	08/10/2015 1410	08/15/2015 1050
680-115692-5	CV0511NN-CS-24	Solid	08/10/2015 1415	08/15/2015 1050
680-115692-6	CV0511TT-CS-6	Solid	08/10/2015 1445	08/15/2015 1050
680-115692-7	CV0511TT-CS-12	Solid	08/10/2015 1450	08/15/2015 1050
680-115692-8	CV0511TT-CS-18	Solid	08/10/2015 1455	08/15/2015 1050
680-115692-9	CV0511TT-CS-24	Solid	08/10/2015 1500	08/15/2015 1050
680-115692-10	CV0511SS-CS-6	Solid	08/10/2015 1535	08/15/2015 1050
680-115692-11	CV0511SS-CS-12	Solid	08/10/2015 1540	08/15/2015 1050
680-115692-12	CV0511SS-CS-18	Solid	08/10/2015 1545	08/15/2015 1050
680-115692-13	CV0511SS-CS-24	Solid	08/10/2015 1550	08/15/2015 1050
680-115692-14	CV0511HHH-CS-6	Solid	08/11/2015 0840	08/15/2015 1050
680-115692-15	CV0511HHH-CSD-12	Solid	08/11/2015 0845	08/15/2015 1050
680-115692-16	CV0511HHH-CS-12	Solid	08/11/2015 0845	08/15/2015 1050
680-115692-17	CV0511HHH-CS-18	Solid	08/11/2015 0850	08/15/2015 1050
680-115692-18	CV0511HHH-CS-24	Solid	08/11/2015 0855	08/15/2015 1050
680-115692-19	CV0511BBB-CS-6	Solid	08/11/2015 0930	08/15/2015 1050
680-115692-20	CV0511BBB-CS-12	Solid	08/11/2015 0935	08/15/2015 1050

ATTACHMENT B
FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results

Attachment B

Analyte	680-115692-1 CV0511NN-CS-6	RL	680-115692-2 CV0511NN-CSD-6	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene		76	38 J	76	mg/kg	380	NA	38	152	None, absolute difference \leq 2x Avg RL
Anthracene	63 J	76	88	76	mg/kg	380	NA	25	152	None, absolute difference \leq 2x Avg RL
Benzo[a]anthracene	400	76	380	76	mg/kg	380	NA	20	152	None, absolute difference \leq 2x Avg RL
Benzo[a]pyrene	370	76	330	76	mg/kg	380	NA	40	152	None, absolute difference \leq 2x Avg RL
Benzo[b]fluoranthene	570	76	530	76	mg/kg	380	7	NA	NA	None, RPD \leq 50%
Benzo[g,h,i]perylene	220	76	180	76	mg/kg	380	NA	40	152	None, absolute difference \leq 2x Avg RL
Benzo[k]fluoranthene	190	76	180	76	mg/kg	380	NA	10	152	None, absolute difference \leq 2x Avg RL
Chrysene	440	76	390	76	mg/kg	380	12	NA	NA	None, RPD \leq 50%
Dibenz(a,h)anthracene	71 J	76	70 J	76	mg/kg	380	NA	1	152	None, absolute difference \leq 2x Avg RL
Fluoranthene	760	76	730	76	mg/kg	380	4	NA	NA	None, RPD \leq 50%
Indeno[1,2,3-cd]pyrene	210	76	170	76	mg/kg	380	NA	40	152	None, absolute difference \leq 2x Avg RL
Phenanthrene	290	76	330	76	mg/kg	380	NA	40	152	None, absolute difference \leq 2x Avg RL
Pyrene	580	76	510	76	mg/kg	380	13	NA	NA	None, RPD \leq 50%

Note: If the analyte was not detected, then the cell was left blank.

mg/kg - Milligrams per kilogram
NA - Not applicable
RL - Reporting limit
RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

Evaluation of Field Duplicate Results

Attachment B

Analyte	680-115692-16 CV0511HH-CS-12	RL	680-115692-15 CV0511HH-CSD-12	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Benzo[a]anthracene	52 J	78	100	78	µg/kg	390	NA	48	156	None, absolute difference ≤ 2x Avg RL
Benzo[a]pyrene	47 J	78	95	78	µg/kg	390	NA	48	156	None, absolute difference ≤ 2x Avg RL
Benzo[b]fluoranthene	83	78	150	78	µg/kg	390	NA	67	156	None, absolute difference ≤ 2x Avg RL
Benzo[g,h,i]perylene		78	48 J	78	µg/kg	390	NA	48	156	None, absolute difference ≤ 2x Avg RL
Benzo[k]fluoranthene	33 J	78	64 J	78	µg/kg	390	NA	31	156	None, absolute difference ≤ 2x Avg RL
Chrysene	53 J	78	98	78	µg/kg	390	NA	45	156	None, absolute difference ≤ 2x Avg RL
Fluoranthene	89	78	190	78	µg/kg	390	NA	101	156	None, absolute difference ≤ 2x Avg RL
Phenanthrene	51 J	78	93	78	µg/kg	390	NA	42	156	None, absolute difference ≤ 2x Avg RL
Pyrene	75 J	78	140	78	µg/kg	390	NA	65	156	None, absolute difference ≤ 2x Avg RL

Note: If the analyte was not detected, then the cell was left blank.

mg/kg - Milligrams per kilogram
NA - Not applicable
RL - Reporting limit
RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C
CASE NARRATIVE

CASE NARRATIVE
Client: Oneida Total Integrated Enterprises LLC
Project: 35th Avenue Superfund Site
Report Number: 680-115692-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 8/15/2015 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.8° C and 3.4° C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH

Samples CV0511NN-CS-6 (680-115692-1), CV0511NN-CSD-6 (680-115692-2), CV0511NN-CS-12 (680-115692-3), CV0511NN-CS-18 (680-115692-4), CV0511NN-CS-24 (680-115692-5), CV0511TT-CS-6 (680-115692-6), CV0511TT-CS-12 (680-115692-7), CV0511TT-CS-18 (680-115692-8), CV0511TT-CS-24 (680-115692-9), CV0511SS-CS-6 (680-115692-10), CV0511SS-CS-12 (680-115692-11), CV0511SS-CS-18 (680-115692-12), CV0511SS-CS-24 (680-115692-13), CV0511HHH-CS-6 (680-115692-14), CV0511HHH-CSD-12 (680-115692-15), CV0511HHH-CS-12 (680-115692-16), CV0511HHH-CS-18 (680-115692-17), CV0511HHH-CS-24 (680-115692-18), CV0511BBB-CS-6 (680-115692-19) and CV0511BBB-CS-12 (680-115692-20) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW846 Method 8270D. The samples were prepared on 08/17/2015 and analyzed on 08/18/2015 and 08/19/2015.

Method(s) 8270D_LL_PAH: The following sample(s) required a dilution due to high targets and the nature of the sample matrix: CV0511NN-CS-6 (680-115692-1[10.0]), CV0511NN-CS-6 (680-115692-1[MS][10.0]), CV0511NN-CS-6 (680-115692-1[MSD][10.0]), CV0511NN-CSD-6 (680-115692-2[10.0]), CV0511TT-CS-6 (680-115692-6[10.0]), CV0511TT-CS-12 (680-115692-7[10.0]), CV0511TT-CS-18 (680-115692-8[10.0]), CV0511TT-CS-24 (680-115692-9[10.0]), CV0511SS-CS-6 (680-115692-10[10.0]), CV0511SS-CS-12 (680-115692-11[10.0]), CV0511SS-CS-18 (680-115692-12[10.0]), CV0511HHH-CS-6 (680-115692-14[10.0]), CV0511HHH-CSD-12 (680-115692-15[10.0]), CV0511HHH-CS-12 (680-115692-16[10.0]) and CV0511HHH-CS-18 (680-115692-17[10.0]). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D_LL_PAH: The following sample required a dilution due to the nature of the sample matrix: CV0511BBB-CS-12 (680-115692-20). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D_LL_PAH: The following sample was diluted due to the nature of the sample matrix : CV0511HHH-CS-24 (680-115692-18). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8270D_LL_PAH: The continuing calibration verification (CCV) analyzed in batch 680-396705 was outside the method criteria for the following analyte(s): Acenaphthene, Anthracene and Benzo[b]fluoranthene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D_LL_PAH: The continuing calibration verification (CCV) analyzed in batch 680-396964 was outside the method criteria for the following analyte(s): Dibenz(a,h)anthracene, Fluoranthene, Indeno[1,2,3-cd]pyrene and o-Terphenyl . A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICP)

Samples CV0511NN-CS-6 (680-115692-1), CV0511NN-CSD-6 (680-115692-2), CV0511NN-CS-12 (680-115692-3), CV0511NN-CS-18 (680-115692-4), CV0511NN-CS-24 (680-115692-5), CV0511TT-CS-6 (680-115692-6), CV0511TT-CS-12 (680-115692-7), CV0511TT-CS-18 (680-115692-8), CV0511TT-CS-24 (680-115692-9), CV0511SS-CS-6 (680-115692-10), CV0511SS-CS-12 (680-115692-11), CV0511SS-CS-18 (680-115692-12), CV0511SS-CS-24 (680-115692-13), CV0511HHH-CS-6 (680-115692-14), CV0511HHH-CSD-12 (680-115692-15), CV0511HHH-CS-12 (680-115692-16), CV0511HHH-CS-18 (680-115692-17), CV0511HHH-CS-24 (680-115692-18), CV0511BBB-CS-6 (680-115692-19) and CV0511BBB-CS-12 (680-115692-20) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/17/2015 and analyzed on 08/20/2015.

Arsenic recovery is outside criteria low for the MS of sample CV0511NN-CS-6 (680-115692-1) in batch 680-397264.

Arsenic and Lead recoveries criteria high for the MSD of sample CV0511NN-CS-6 (680-115692-1) in batch 680-397264. Arsenic

exceeded the RPD limit.

Refer to the QC report for details.

Samples CV0511NN-CSD-6 (680-115692-2)[10X], CV0511SS-CS-12 (680-115692-11)[10X] and CV0511HHH-CS-24 (680-115692-18) [10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS/MOISTURE

Samples CV0511NN-CS-6 (680-115692-1), CV0511NN-CSD-6 (680-115692-2), CV0511NN-CS-12 (680-115692-3), CV0511NN-CS-18 (680-115692-4), CV0511NN-CS-24 (680-115692-5), CV0511TT-CS-6 (680-115692-6), CV0511TT-CS-12 (680-115692-7), CV0511TT-CS-18 (680-115692-8), CV0511TT-CS-24 (680-115692-9), CV0511SS-CS-6 (680-115692-10), CV0511SS-CS-12 (680-115692-11), CV0511SS-CS-18 (680-115692-12), CV0511SS-CS-24 (680-115692-13), CV0511HHH-CS-6 (680-115692-14), CV0511HHH-CSD-12 (680-115692-15), CV0511HHH-CS-12 (680-115692-16), CV0511HHH-CS-18 (680-115692-17), CV0511HHH-CS-24 (680-115692-18), CV0511BBB-CS-6 (680-115692-19) and CV0511BBB-CS-12 (680-115692-20) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 08/18/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ATTACHMENT D
QUALIFIED SAMPLE RESULTS

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511NN-CS-6

Lab Sample ID: 680-115692-1

Matrix: Solid

Lab File ID: 1YF18009.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 14:00

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 29.96(g)

Date Analyzed: 08/18/2015 15:27

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 11.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	76	U	76	37
208-96-8	Acenaphthylene	76	U	76	37
120-12-7	Anthracene	63	J	76	37
56-55-3	Benzo[a]anthracene	400		76	37
50-32-8	Benzo[a]pyrene	370		76	14
205-99-2	Benzo[b]fluoranthene	570		76	37
191-24-2	Benzo[g,h,i]perylene	220		76	37
207-08-9	Benzo[k]fluoranthene	190		76	23
218-01-9	Chrysene	440		76	37
53-70-3	Dibenz(a,h)anthracene	71	J	76	37
206-44-0	Fluoranthene	760		76	37
86-73-7	Fluorene	76	U	76	37
193-39-5	Indeno[1,2,3-cd]pyrene	210		76	37
90-12-0	1-Methylnaphthalene	76	U	76	35
91-57-6	2-Methylnaphthalene	76	U	76	37
91-20-3	Naphthalene	76	U	76	37
85-01-8	Phenanthrene	290		76	27
129-00-0	Pyrene	580		76	37

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511NN-CSD-6

Lab Sample ID: 680-115692-2

Matrix: Solid

Lab File ID: 1YF18010.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 14:00

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 29.95(g)

Date Analyzed: 08/18/2015 15:56

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 12.0

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	38	J	76	38
208-96-8	Acenaphthylene	76	U	76	38
120-12-7	Anthracene	88		76	38
56-55-3	Benzo[a]anthracene	380		76	38
50-32-8	Benzo[a]pyrene	330		76	14
205-99-2	Benzo[b]fluoranthene	530		76	38
191-24-2	Benzo[g,h,i]perylene	180		76	38
207-08-9	Benzo[k]fluoranthene	180		76	23
218-01-9	Chrysene	390		76	38
53-70-3	Dibenz(a,h)anthracene	70	J	76	38
206-44-0	Fluoranthene	730		76	38
86-73-7	Fluorene	76	U	76	38
193-39-5	Indeno[1,2,3-cd]pyrene	170		76	38
90-12-0	1-Methylnaphthalene	76	U	76	35
91-57-6	2-Methylnaphthalene	76	U	76	38
91-20-3	Naphthalene	76	U	76	38
85-01-8	Phenanthrene	330		76	27
129-00-0	Pyrene	510		76	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511NN-CS-12

Lab Sample ID: 680-115692-3

Matrix: Solid

Lab File ID: 1YF18011.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 14:05

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.17(g)

Date Analyzed: 08/18/2015 16:25

Con. Extract Vol.: 1(mL)

Dilution Factor: 1

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 15.0

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	7.8	U	7.8	3.9
208-96-8	Acenaphthylene	7.8	U	7.8	3.9
120-12-7	Anthracene	8.1		7.8	3.9
56-55-3	Benzo[a]anthracene	63		7.8	3.9
50-32-8	Benzo[a]pyrene	56		7.8	1.4
205-99-2	Benzo[b]fluoranthene	98		7.8	3.9
191-24-2	Benzo[g,h,i]perylene	28		7.8	3.9
207-08-9	Benzo[k]fluoranthene	33		7.8	2.3
218-01-9	Chrysene	67		7.8	3.9
53-70-3	Dibenz(a,h)anthracene	9.7		7.8	3.9
206-44-0	Fluoranthene	120		7.8	3.9
86-73-7	Fluorene	7.8	U	7.8	3.9
193-39-5	Indeno[1,2,3-cd]pyrene	24		7.8	3.9
90-12-0	1-Methylnaphthalene	7.8	U	7.8	3.6
91-57-6	2-Methylnaphthalene	7.8	U	7.8	3.9
91-20-3	Naphthalene	4.5	J	7.8	3.9
85-01-8	Phenanthrene	39		7.8	2.8
129-00-0	Pyrene	81		7.8	3.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	68		36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511NN-CS-18

Lab Sample ID: 680-115692-4

Matrix: Solid

Lab File ID: 1YF18012.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 14:10

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 29.94(g)

Date Analyzed: 08/18/2015 16:54

Con. Extract Vol.: 1(mL)

Dilution Factor: 1

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 18.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	8.2	U	8.2	4.0
208-96-8	Acenaphthylene	4.7	J	8.2	4.0
120-12-7	Anthracene	11		8.2	4.0
56-55-3	Benzo[a]anthracene	66		8.2	4.0
50-32-8	Benzo[a]pyrene	66		8.2	1.5
205-99-2	Benzo[b]fluoranthene	140		8.2	4.0
191-24-2	Benzo[g,h,i]perylene	35		8.2	4.0
207-08-9	Benzo[k]fluoranthene	42		8.2	2.4
218-01-9	Chrysene	83		8.2	4.0
53-70-3	Dibenz(a,h)anthracene	13		8.2	4.0
206-44-0	Fluoranthene	110		8.2	4.0
86-73-7	Fluorene	8.2	U	8.2	4.0
193-39-5	Indeno[1,2,3-cd]pyrene	26		8.2	4.0
90-12-0	1-Methylnaphthalene	14		8.2	3.8
91-57-6	2-Methylnaphthalene	16		8.2	4.0
91-20-3	Naphthalene	17		8.2	4.0
85-01-8	Phenanthrene	57		8.2	2.9
129-00-0	Pyrene	86		8.2	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	81		36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-115692-1</u>
SDG No.: <u>680-115692-01</u>	
Client Sample ID: <u>CV0511NN-CS-24</u>	Lab Sample ID: <u>680-115692-5</u>
Matrix: <u>Solid</u>	Lab File ID: <u>1YF18013.D</u>
Analysis Method: <u>8270D_LL_PAH</u>	Date Collected: <u>08/10/2015 14:15</u>
Extract. Method: <u>3546</u>	Date Extracted: <u>08/17/2015 10:44</u>
Sample wt/vol: <u>30.01(g)</u>	Date Analyzed: <u>08/18/2015 17:22</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>2(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>17.8</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>396712</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	8.2	U	8.2	4.0
208-96-8	Acenaphthylene	8.2	U	8.2	4.0
120-12-7	Anthracene	8.2	U	8.2	4.0
56-55-3	Benzo[a]anthracene	11		8.2	4.0
50-32-8	Benzo[a]pyrene	12		8.2	1.5
205-99-2	Benzo[b]fluoranthene	24		8.2	4.0
191-24-2	Benzo[g,h,i]perylene	6.9	J	8.2	4.0
207-08-9	Benzo[k]fluoranthene	7.0	J	8.2	2.4
218-01-9	Chrysene	19		8.2	4.0
53-70-3	Dibenz(a,h)anthracene	8.2	U	8.2	4.0
206-44-0	Fluoranthene	21		8.2	4.0
86-73-7	Fluorene	8.2	U	8.2	4.0
193-39-5	Indeno[1,2,3-cd]pyrene	4.8	J	8.2	4.0
90-12-0	1-Methylnaphthalene	8.2	U	8.2	3.8
91-57-6	2-Methylnaphthalene	8.2	U	8.2	4.0
91-20-3	Naphthalene	8.2	U	8.2	4.0
85-01-8	Phenanthrene	11		8.2	2.9
129-00-0	Pyrene	14		8.2	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	77		36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511TT-CS-6

Lab Sample ID: 680-115692-6

Matrix: Solid

Lab File ID: 1YF18014.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 14:45

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.11(g)

Date Analyzed: 08/18/2015 17:51

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 11.3

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	75	U	75	37
208-96-8	Acenaphthylene	75	U	75	37
120-12-7	Anthracene	75	U	75	37
56-55-3	Benzo[a]anthracene	100		75	37
50-32-8	Benzo[a]pyrene	99		75	13
205-99-2	Benzo[b]fluoranthene	150		75	37
191-24-2	Benzo[g,h,i]perylene	57	J	75	37
207-08-9	Benzo[k]fluoranthene	64	J	75	22
218-01-9	Chrysene	100		75	37
53-70-3	Dibenz(a,h)anthracene	75	U	75	37
206-44-0	Fluoranthene	170		75	37
86-73-7	Fluorene	75	U	75	37
193-39-5	Indeno[1,2,3-cd]pyrene	38	J	75	37
90-12-0	1-Methylnaphthalene	75	U	75	35
91-57-6	2-Methylnaphthalene	75	U	75	37
91-20-3	Naphthalene	75	U	75	37
85-01-8	Phenanthrene	77		75	27
129-00-0	Pyrene	130		75	37

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35 Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511TT-CS-12

Lab Sample ID: 680-115692-7

Matrix: Solid

Lab File ID: 1YF18015.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 14:50

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.19(g)

Date Analyzed: 08/18/2015 18:19

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 13.8

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	77	U	77	38
208-96-8	Acenaphthylene	77	U	77	38
120-12-7	Anthracene	77	U	77	38
56-55-3	Benzo[a]anthracene	120		77	38
50-32-8	Benzo[a]pyrene	130		77	14
205-99-2	Benzo[b]fluoranthene	190		77	38
191-24-2	Benzo[g,h,i]perylene	66	J	77	38
207-08-9	Benzo[k]fluoranthene	86		77	23
218-01-9	Chrysene	130		77	38
53-70-3	Dibenz(a,h)anthracene	77	U	77	38
206-44-0	Fluoranthene	230		77	38
86-73-7	Fluorene	77	U	77	38
193-39-5	Indeno[1,2,3-cd]pyrene	44	J	77	38
90-12-0	1-Methylnaphthalene	43	J	77	36
91-57-6	2-Methylnaphthalene	44	J	77	38
91-20-3	Naphthalene	77	U	77	38
85-01-8	Phenanthrene	110		77	28
129-00-0	Pyrene	180		77	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511TT-CS-18

Lab Sample ID: 680-115692-8

Matrix: Solid

Lab File ID: 1YF18016.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 14:55

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 29.93(g)

Date Analyzed: 08/18/2015 18:48

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 17.1

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	81	U	81	40
208-96-8	Acenaphthylene	81	U	81	40
120-12-7	Anthracene	71	J	81	40
56-55-3	Benzo[a]anthracene	240		81	40
50-32-8	Benzo[a]pyrene	220		81	15
205-99-2	Benzo[b]fluoranthene	320		81	40
191-24-2	Benzo[g,h,i]perylene	99		81	40
207-08-9	Benzo[k]fluoranthene	150		81	24
218-01-9	Chrysene	240		81	40
53-70-3	Dibenz(a,h)anthracene	81	U	81	40
206-44-0	Fluoranthene	490		81	40
86-73-7	Fluorene	81	U	81	40
193-39-5	Indeno[1,2,3-cd]pyrene	70	J	81	40
90-12-0	1-Methylnaphthalene	81	U	81	37
91-57-6	2-Methylnaphthalene	81	U	81	40
91-20-3	Naphthalene	81	U	81	40
85-01-8	Phenanthrene	300		81	29
129-00-0	Pyrene	370		81	40

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511TT-CS-24

Lab Sample ID: 680-115692-9

Matrix: Solid

Lab File ID: 1YF18017.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 15:00

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.06(g)

Date Analyzed: 08/18/2015 19:17

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 20.7

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	84	U	84	42
208-96-8	Acenaphthylene	84	U	84	42
120-12-7	Anthracene	55	J	84	42
56-55-3	Benzo[a]anthracene	250		84	42
50-32-8	Benzo[a]pyrene	200		84	15
205-99-2	Benzo[b]fluoranthene	390		84	42
191-24-2	Benzo[g,h,i]perylene	97		84	42
207-08-9	Benzo[k]fluoranthene	130		84	25
218-01-9	Chrysene	280		84	42
53-70-3	Dibenz(a,h)anthracene	84	U	84	42
206-44-0	Fluoranthene	520		84	42
86-73-7	Fluorene	84	U	84	42
193-39-5	Indeno[1,2,3-cd]pyrene	75	J	84	42
90-12-0	1-Methylnaphthalene	84	U	84	39
91-57-6	2-Methylnaphthalene	84	U	84	42
91-20-3	Naphthalene	47	J	84	42
85-01-8	Phenanthrene	270		84	30
129-00-0	Pyrene	380		84	42

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511SS-CS-6

Lab Sample ID: 680-115692-10

Matrix: Solid

Lab File ID: 1YF18018.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 15:35

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.04(g)

Date Analyzed: 08/18/2015 19:45

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 13.5

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	77	U	77	38
208-96-8	Acenaphthylene	77	U	77	38
120-12-7	Anthracene	77	U	77	38
56-55-3	Benzo[a]anthracene	74	J	77	38
50-32-8	Benzo[a]pyrene	74	J	77	14
205-99-2	Benzo[b]fluoranthene	110		77	38
191-24-2	Benzo[g,h,i]perylene	42	J	77	38
207-08-9	Benzo[k]fluoranthene	52	J	77	23
218-01-9	Chrysene	78		77	38
53-70-3	Dibenz(a,h)anthracene	77	U	77	38
206-44-0	Fluoranthene	130		77	38
86-73-7	Fluorene	77	U	77	38
193-39-5	Indeno[1,2,3-cd]pyrene	77	U	77	38
90-12-0	1-Methylnaphthalene	77	U	77	36
91-57-6	2-Methylnaphthalene	77	U	77	38
91-20-3	Naphthalene	77	U	77	38
85-01-8	Phenanthrene	61	J	77	28
129-00-0	Pyrene	110		77	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-115692-1
 SDG No.: 680-115692-01
 Client Sample ID: CV0511SS-CS-12 Lab Sample ID: 680-115692-11
 Matrix: Solid Lab File ID: 1YF18019.D
 Analysis Method: 8270D_LL_PAH Date Collected: 08/10/2015 15:40
 Extract. Method: 3546 Date Extracted: 08/17/2015 10:44
 Sample wt/vol: 30.31(g) Date Analyzed: 08/18/2015 20:13
 Con. Extract Vol.: 1(mL) Dilution Factor: 10
 Injection Volume: 2(uL) Level: (low/med) Low
 % Moisture: 13.6 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 396712 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	68	J	77	38
208-96-8	Acenaphthylene	77	U	77	38
120-12-7	Anthracene	110		77	38
56-55-3	Benzo[a]anthracene	420		77	38
50-32-8	Benzo[a]pyrene	380		77	14
205-99-2	Benzo[b]fluoranthene	600		77	38
191-24-2	Benzo[g,h,i]perylene	170		77	38
207-08-9	Benzo[k]fluoranthene	270		77	23
218-01-9	Chrysene	430		77	38
53-70-3	Dibenz(a,h)anthracene	58	J	77	38
206-44-0	Fluoranthene	1000		77	38
86-73-7	Fluorene	47	J	77	38
193-39-5	Indeno[1,2,3-cd]pyrene	130		77	38
90-12-0	1-Methylnaphthalene	77	U	77	36
91-57-6	2-Methylnaphthalene	77	U	77	38
91-20-3	Naphthalene	77	U	77	38
85-01-8	Phenanthrene	600		77	27
129-00-0	Pyrene	730		77	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 33rd Avenue Removal Site, Birmingham, Alabama, Revision 1 (O/I E, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511SS-CS-18

Lab Sample ID: 680-115692-12

Matrix: Solid

Lab File ID: 1YF18020.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 15:45

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.03(g)

Date Analyzed: 08/18/2015 20:42

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 16.0

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	80	U	80	39
208-96-8	Acenaphthylene	80	U	80	39
120-12-7	Anthracene	81		80	39
56-55-3	Benzo[a]anthracene	320		80	39
50-32-8	Benzo[a]pyrene	260		80	14
205-99-2	Benzo[b]fluoranthene	430		80	39
191-24-2	Benzo[g,h,i]perylene	130		80	39
207-08-9	Benzo[k]fluoranthene	190		80	24
218-01-9	Chrysene	310		80	39
53-70-3	Dibenz(a,h)anthracene	44	J	80	39
206-44-0	Fluoranthene	640		80	39
86-73-7	Fluorene	80	U	80	39
193-39-5	Indeno[1,2,3-cd]pyrene	88		80	39
90-12-0	1-Methylnaphthalene	80	U	80	37
91-57-6	2-Methylnaphthalene	45	J	80	39
91-20-3	Naphthalene	40	J	80	39
85-01-8	Phenanthrene	380		80	29
129-00-0	Pyrene	490		80	39

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 33rd Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511SS-CS-24

Lab Sample ID: 680-115692-13

Matrix: Solid

Lab File ID: 1YF18021.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/10/2015 15:50

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.10(g)

Date Analyzed: 08/18/2015 21:10

Con. Extract Vol.: 1(mL)

Dilution Factor: 1

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 18.5

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	8.2	U	8.2	4.0
208-96-8	Acenaphthylene	8.2	U	8.2	4.0
120-12-7	Anthracene	8.8		8.2	4.0
56-55-3	Benzo[a]anthracene	35		8.2	4.0
50-32-8	Benzo[a]pyrene	32		8.2	1.5
205-99-2	Benzo[b]fluoranthene	65		8.2	4.0
191-24-2	Benzo[g,h,i]perylene	19		8.2	4.0
207-08-9	Benzo[k]fluoranthene	20		8.2	2.4
218-01-9	Chrysene	49		8.2	4.0
53-70-3	Dibenz(a,h)anthracene	5.7	J	8.2	4.0
206-44-0	Fluoranthene	73		8.2	4.0
86-73-7	Fluorene	8.2	U	8.2	4.0
193-39-5	Indeno[1,2,3-cd]pyrene	12		8.2	4.0
90-12-0	1-Methylnaphthalene	14		8.2	3.8
91-57-6	2-Methylnaphthalene	8.2		8.2	4.0
91-20-3	Naphthalene	9.7		8.2	4.0
85-01-8	Phenanthrene	52		8.2	2.9
129-00-0	Pyrene	54		8.2	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	93		36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511HHH-CS-6

Lab Sample ID: 680-115692-14

Matrix: Solid

Lab File ID: 1YF18022.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/11/2015 08:40

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.13(g)

Date Analyzed: 08/18/2015 21:38

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 9.5

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	74	U	74	36
208-96-8	Acenaphthylene	74	U	74	36
120-12-7	Anthracene	53	J	74	36
56-55-3	Benzo[a]anthracene	220		74	36
50-32-8	Benzo[a]pyrene	190		74	13
205-99-2	Benzo[b]fluoranthene	300		74	36
191-24-2	Benzo[g,h,i]perylene	89		74	36
207-08-9	Benzo[k]fluoranthene	130		74	22
218-01-9	Chrysene	210		74	36
53-70-3	Dibenz(a,h)anthracene	74	U	74	36
206-44-0	Fluoranthene	450		74	36
86-73-7	Fluorene	74	U	74	36
193-39-5	Indeno[1,2,3-cd]pyrene	57	J	74	36
90-12-0	1-Methylnaphthalene	74	U	74	34
91-57-6	2-Methylnaphthalene	74	U	74	36
91-20-3	Naphthalene	74	U	74	36
85-01-8	Phenanthrene	250		74	26
129-00-0	Pyrene	340		74	36

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event (QAPP) for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511HHH-CSD-12

Lab Sample ID: 680-115692-15

Matrix: Solid

Lab File ID: 1YF18023.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/11/2015 08:45

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.06(g)

Date Analyzed: 08/18/2015 22:06

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 14.4

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	78	U	78	38
208-96-8	Acenaphthylene	78	U	78	38
120-12-7	Anthracene	78	U	78	38
56-55-3	Benzo[a]anthracene	100		78	38
50-32-8	Benzo[a]pyrene	95		78	14
205-99-2	Benzo[b]fluoranthene	150		78	38
191-24-2	Benzo[g,h,i]perylene	48	J	78	38
207-08-9	Benzo[k]fluoranthene	64	J	78	23
218-01-9	Chrysene	98		78	38
53-70-3	Dibenz(a,h)anthracene	78	U	78	38
206-44-0	Fluoranthene	190		78	38
86-73-7	Fluorene	78	U	78	38
193-39-5	Indeno[1,2,3-cd]pyrene	78	U	78	38
90-12-0	1-Methylnaphthalene	78	U	78	36
91-57-6	2-Methylnaphthalene	78	U	78	38
91-20-3	Naphthalene	78	U	78	38
85-01-8	Phenanthrene	93		78	28
129-00-0	Pyrene	140		78	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511HHH-CS-12

Lab Sample ID: 680-115692-16

Matrix: Solid

Lab File ID: 1YF18024.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/11/2015 08:45

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.10(g)

Date Analyzed: 08/18/2015 22:34

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 14.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396712

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	78	U	78	38
208-96-8	Acenaphthylene	78	U	78	38
120-12-7	Anthracene	78	U	78	38
56-55-3	Benzo[a]anthracene	52	J	78	38
50-32-8	Benzo[a]pyrene	47	J	78	14
205-99-2	Benzo[b]fluoranthene	83		78	38
191-24-2	Benzo[g,h,i]perylene	78	U	78	38
207-08-9	Benzo[k]fluoranthene	33	J	78	23
218-01-9	Chrysene	53	J	78	38
53-70-3	Dibenz[a,h]anthracene	78	U	78	38
206-44-0	Fluoranthene	89		78	38
86-73-7	Fluorene	78	U	78	38
193-39-5	Indeno[1,2,3-cd]pyrene	78	U	78	38
90-12-0	1-Methylnaphthalene	78	U	78	36
91-57-6	2-Methylnaphthalene	78	U	78	38
91-20-3	Naphthalene	78	U	78	38
85-01-8	Phenanthrene	51	J	78	28
129-00-0	Pyrene	75	J	78	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-115692-1</u>
SDG No.: <u>680-115692-01</u>	
Client Sample ID: <u>CV0511HHH-CS-18</u>	Lab Sample ID: <u>680-115692-17</u>
Matrix: <u>Solid</u>	Lab File ID: <u>1YF18025.D</u>
Analysis Method: <u>8270D_LL_PAH</u>	Date Collected: <u>08/11/2015 08:50</u>
Extract. Method: <u>3546</u>	Date Extracted: <u>08/17/2015 10:44</u>
Sample wt/vol: <u>30.05(g)</u>	Date Analyzed: <u>08/18/2015 23:02</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>2(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>15.6</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>396712</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	79	U	79	39
208-96-8	Acenaphthylene	79	U	79	39
120-12-7	Anthracene	79	U	79	39
56-55-3	Benzo[a]anthracene	79	U	79	39
50-32-8	Benzo[a]pyrene	79	U	79	14
205-99-2	Benzo[b]fluoranthene	52	J	79	39
191-24-2	Benzo[g,h,i]perylene	79	U	79	39
207-08-9	Benzo[k]fluoranthene	79	U	79	24
218-01-9	Chrysene	79	U	79	39
53-70-3	Dibenz(a,h)anthracene	79	U	79	39
206-44-0	Fluoranthene	55	J	79	39
86-73-7	Fluorene	79	U	79	39
193-39-5	Indeno[1,2,3-cd]pyrene	79	U	79	39
90-12-0	1-Methylnaphthalene	79	U	79	37
91-57-6	2-Methylnaphthalene	79	U	79	39
91-20-3	Naphthalene	79	U	79	39
85-01-8	Phenanthrene	79	U	79	28
129-00-0	Pyrene	45	J	79	39

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 33rd Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511HHH-CS-24

Lab Sample ID: 680-115692-18

Matrix: Solid

Lab File ID: 1KH19025.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/11/2015 08:55

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.02(g)

Date Analyzed: 08/19/2015 21:38

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 17.6

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396964

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	81	U	81	40
208-96-8	Acenaphthylene	81	U	81	40
120-12-7	Anthracene	81	U	81	40
56-55-3	Benzo[a]anthracene	120		81	40
50-32-8	Benzo[a]pyrene	100		81	15
205-99-2	Benzo[b]fluoranthene	190		81	40
191-24-2	Benzo[g,h,i]perylene	88		81	40
207-08-9	Benzo[k]fluoranthene	74	J	81	24
218-01-9	Chrysene	130		81	40
53-70-3	Dibenz(a,h)anthracene	81	UJ	81	40
206-44-0	Fluoranthene	160	J	81	40
86-73-7	Fluorene	81	U	81	40
193-39-5	Indeno[1,2,3-cd]pyrene	59	J	81	40
90-12-0	1-Methylnaphthalene	81	U	81	38
91-57-6	2-Methylnaphthalene	81	U	81	40
91-20-3	Naphthalene	81	U	81	40
85-01-8	Phenanthrene	72	J	81	29
129-00-0	Pyrene	240		81	40

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 33rd Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-115692-1

SDG No.: 680-115692-01

Client Sample ID: CV0511BBB-CS-6

Lab Sample ID: 680-115692-19

Matrix: Solid

Lab File ID: 1DF18005.D

Analysis Method: 8270D_LL_PAH

Date Collected: 08/11/2015 09:30

Extract. Method: 3546

Date Extracted: 08/17/2015 10:44

Sample wt/vol: 30.12(g)

Date Analyzed: 08/18/2015 14:45

Con. Extract Vol.: 1(mL)

Dilution Factor: 1

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 4.1

GPC Cleanup: (Y/N) N

Analysis Batch No.: 396705

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	6.6	J	7.0	3.4
208-96-8	Acenaphthylene	7.0	U	7.0	3.4
120-12-7	Anthracene	9.5		7.0	3.4
56-55-3	Benzo[a]anthracene	38		7.0	3.4
50-32-8	Benzo[a]pyrene	35		7.0	1.2
205-99-2	Benzo[b]fluoranthene	37	J	7.0	3.4
191-24-2	Benzo[g,h,i]perylene	23		7.0	3.4
207-08-9	Benzo[k]fluoranthene	22		7.0	2.1
218-01-9	Chrysene	39		7.0	3.4
53-70-3	Dibenz(a,h)anthracene	6.9	J	7.0	3.4
206-44-0	Fluoranthene	74		7.0	3.4
86-73-7	Fluorene	5.2	J	7.0	3.4
193-39-5	Indeno[1,2,3-cd]pyrene	25		7.0	3.4
90-12-0	1-Methylnaphthalene	7.0	U	7.0	3.2
91-57-6	2-Methylnaphthalene	7.0	U	7.0	3.4
91-20-3	Naphthalene	7.0	U	7.0	3.4
85-01-8	Phenanthrene	60		7.0	2.5
129-00-0	Pyrene	79		7.0	3.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	119		36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 15th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-115692-1</u>
SDG No.: <u>680-115692-01</u>	
Client Sample ID: <u>CV0511BBB-CS-12</u>	Lab Sample ID: <u>680-115692-20</u>
Matrix: <u>Solid</u>	Lab File ID: <u>1DF18006.D</u>
Analysis Method: <u>8270D_LL_PAH</u>	Date Collected: <u>08/11/2015 09:35</u>
Extract. Method: <u>3546</u>	Date Extracted: <u>08/17/2015 10:44</u>
Sample wt/vol: <u>29.94(g)</u>	Date Analyzed: <u>08/18/2015 15:14</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>2(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>13.0</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>396705</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	77	9 UJ	77	38
208-96-8	Acenaphthylene	77	U	77	38
120-12-7	Anthracene	77	U	77	38
56-55-3	Benzo[a]anthracene	77		77	38
50-32-8	Benzo[a]pyrene	72	J	77	14
205-99-2	Benzo[b]fluoranthene	73	J J	77	38
191-24-2	Benzo[g,h,i]perylene	92		77	38
207-08-9	Benzo[k]fluoranthene	56	J	77	23
218-01-9	Chrysene	87		77	38
53-70-3	Dibenz(a,h)anthracene	77	U	77	38
206-44-0	Fluoranthene	130		77	38
86-73-7	Fluorene	77	U	77	38
193-39-5	Indeno[1,2,3-cd]pyrene	64	J	77	38
90-12-0	1-Methylnaphthalene	77	U	77	36
91-57-6	2-Methylnaphthalene	77	U	77	38
91-20-3	Naphthalene	77	U	77	38
85-01-8	Phenanthrene	72	J	77	28
129-00-0	Pyrene	130		77	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)